United States Department of the Interior Bureau of Land Management Elko District Office 3900 East Idaho Street Elko, NV 89801

## RECORD OF DECISION

# BARRICK GOLDSTRIKE MINES INC. BETZE PIT EXPANSION PROJECT

3809/NVN-70708 BLM/NV/EK/PL-GI-08/22 + 1793 BLM/NV/EK/ES-GI-09/10 + 1793

#### Introduction

Barrick Goldstrike Mines Inc. (BGMI) a wholly owned subsidiary of Barrick Gold Corporation, owns and operates the Goldstrike Mine property, which is located in Elko and Eureka counties, Nevada in Township 36 North, Range 49 East and Township 36 North, Range 50 East. In 1989, BGMI submitted a Plan of Operations (Plan) pursuant to the Surface Management Regulations, Title 43 Code of Federal Regulations (CFR) Part 3809, to the Bureau of Land Management (BLM) for the Betze Project which is part of the Goldstrike Mine property. As provided by Section 102(c) of the National Environmental Policy Act of 1969 (NEPA), BLM prepared an environmental impact statement (EIS) with respect to BGMI's proposed Plan. The Final EIS and Record of Decision (ROD) for the Betze Project were issued on June 10, 1991. Most changes since 1991 have occurred on private land and, thus, have not required BLM review and approval.

In 2007, BGMI proposed to construct and operate the Betze Pit Expansion Project (BPEP), an amendment to the existing Plan. The BPEP, which includes expansion of the Betze Pit, construction of the Clydesdale Waste Rock Facility (WRF) and haul road, and construction of the Goldstrike No. 3 Tailings Facility, requires 510 acres of public land although the majority of the proposed action would occur on privately owned land (967 acres). The BPEP would utilize many of the existing facilities at the Goldstrike Mine, including ore processing facilities and ancillary support facilities. The BPEP would extend mine life for an additional four years through 2015, with ore processing extended for an additional five years, approximately through 2031. Total additional employment due to the BPEP is approximately four years for 1600 employees. The BLM determined a supplemental environmental impact statement (EIS) was required to analyze the proposal. Public scoping was initiated in March 2007.

The BLM issued the Draft EIS (BLM/NV/EK/PL-GI-08/22 + 1793) on August 22, 2008. BLM issued an abbreviated Final EIS (BLM/NV/EK/ES-GI-09/10 +1793) on March 27, 2009, that includes comments, responses to comments, and revisions to the Draft EIS.

#### Decision

Based on the analysis in the Betze Pit Expansion Project EIS, I have decided to approve the Proposed Action, as it is described in Section 2.3 of the Draft EIS, to the extent that the proposal involves or impacts public land as provided for by the 43 CFR 3809 regulations. This approval provides for use of the public land necessary for the following aspects of BPEP and includes changes to the Proposed Action that occurred during the preparation of the EIS:

- Expansion of the existing Betze Pit to include two additional laybacks to the north and west with associated in-pit and perimeter haul roads and buffer (129 acres of new disturbance of which 50 acres are public land).
- Construction of the Clydesdale WRF and associated access road (572 acres of new disturbance of which 414 acres are public land).
- Construction and operation of the Goldstrike No. 3 Tailings Facility (690 acres of which 46 acres are public land and 211 acres are previously disturbed).
- Deposition of tailings in the proposed Goldstrike No. 3 Tailings Facility so that the facility drains to the east, away from the impoundment.
- Extension of roaster facility operations for five years.
- Relocation of the transmission line to the west of the to-be-constructed Clydesdale Waste Rock Facility.
- Decrease of the expected Betze Pit Lake acreage from 985 (the 2000 Betze SEIS estimate) to 927 acres due to in-pit waste rock disposal as described in the Draft EIS.
- A revised total of 315 million tons of waste rock will be generated by the Betze Pit Expansion Project. The original estimate of 316 million tons was adjusted based on revised waste rock calculations.

#### **Applicant Committed Environmental Protection Measures and Reclamation Plan**

- Extension of the noxious weed management and reclamation plan.
- BGMI provided conceptual design documentation which proposes to construct the Clydesdale WRF in 100-foot lifts with 250-foot stepouts, allowing for an overall post-mining configuration of 2.5H:1V to 2.8H:1V slopes. BGMI will also reclaim the facility based on morphometric and hydrologic principles to resemble surrounding landforms to the extent practicable in order to minimize erosion and promote long-term stability.
- Reclamation of the eastern portion of the Clydesdale WRF and the western portion of the Bazza WRF along the wildlife migration corridor will be completed as soon as possible to minimize disturbance to the existing mule deer migration corridor.
- The haul road will be constructed with two strategically placed breaks/gaps to allow for wildlife movement while minimizing the potential for wildlife/vehicle collisions along the haul road.
- To provide a spatial buffer for Boulder, Bell, and Rodeo creeks, the Clydesdale WRF will be set back at least 100 feet from the uppermost edge of the creek banks.
- Limestone amendment to Betze Pit Lake BGMI will place approximately 100 tons of limestone or other neutralizing material on the pit floor where the pit lake would first begin

to appear or where ponding would occur to act as a neutralizing buffer for potential acidic runoff during the initial years of the groundwater recharge of the pit lake.

## **Monitoring**

- BGMI committed to working with NDOW, BLM, and other interested parties to monitor deer movement in the South Tuscarora deer migration corridor for two seasons.
- Goldstrike Mine operations staff will be on site until 2045, rather than 2030. This change will result in a modification to the Long Term Monitoring trust fund (Exhibit D of the 1991 ROD for the Barrick Goldstrike Mine Expansion). With the modification, expenditures from the fund will begin in 2045 rather than 2030 and the reclamation bond will be increased to account for the additional monitoring costs between 2030 and 2045. The Long Term Monitoring trust fund was reviewed and the monies in the trust fund were found adequate for the purposes for which the fund was created given the delay in expenditures.
- Existing monitoring and mitigation requirements as described in Section 2.3.6 of the Draft EIS are adequate. These requirements include monitoring required by the Boulder Valley Monitoring Plan (surface and groundwater), compliance examinations required by the 43 CFR 3809 regulations, and monitoring and compliance examinations by state agencies including the Nevada Division of Environmental Protection.

## **Alternatives to the Proposed Action**

#### **No Action Alternative**

The No Action Alternative would mean Barrick Goldstrike Mines, Inc. (BGMI) would not receive approval for additional mining operations on public land as proposed. Under such circumstances, BGMI could continue with approved operations (described in Section 2.2 of the Draft EIS) until completed. BGMI could also modify the proposed action and resubmit to the BLM, or modify the proposed action to exclude additional use of public land and thereby not be required to submit a proposal to the BLM for approval.

## **Bazza Waste Rock Facility Alternative**

The Bazza WRF alternative would eliminate construction of the Clydesdale WRF in favor of expanding the Bazza WRF. The alternative would require handling of Carlin Formation material as waste rock rather than using the material in reclamation due to the safety and technical considerations related to stockpiling the unstable material. This alternative would also result in delayed reclamation of the Bazza WRF compared to the proposed action and increase the costs and resources required for mining. Other aspects of this alternative are the same as the proposed action.

## **Alternatives Considered but Eliminated from Detailed Analysis**

The BLM considered four other alternatives but eliminated them from detailed analysis as discussed in Section 2.5 of the Draft EIS. The alternatives and the primary reasons for elimination are: 1) Modified Clydesdale Waste Rock Facility – reduced footprint resulting in a

higher facility would cost more and make the facility impractical to reclaim in a hydrologically sound manner; 2) Offsite Waste Rock Facility – no site available within a reasonable distance of the mine; 3) Underground Mining – the ore grade is not high enough to support the additional cost of underground mining; 4) Reduced Tailings Facility – the environmental benefit of not using the small portion of public land necessary for the proposed action is outweighed by the benefit of the additional tailings capacity available through the proposed action.

## **Environmentally Preferred Alternative**

The environmentally preferred alternative is the No Action Alternative because it would create the least impact to wildlife. However, the EIS identifies the Proposed Action as BLM's preferred alternative because the BLM believes the benefits to the local economy and the management considerations described below outweigh the limited impact to wildlife, particularly considering the mitigation measures that have been and will be implemented at the mine.

### **Management Considerations**

In making my decision to approve the Proposed Action, I have carefully considered the following factors.

- The Proposed Action is the alternative that best fulfills the agency's statutory mission and responsibilities, considering economic, environmental, technical, and other factors.
- The Decision conforms to the Elko Resource Management Plan's objective for minerals: BLM will "Maintain public lands open for exploration, development, and production of mineral resources while mitigating conflicts with wildlife, wild horses, recreation and wilderness resources."
- Implementation of this Decision will not cause unnecessary or undue degradation of the public lands and is consistent with other legal requirements.
- The Decision allows for extension of mining and employment for up to 1,600 mine workers for four more years in an economy highly dependent on mining.
- The Decision will help maintain revenue for local government.
- The Decision will allow the existing Bazza WRF to be reclaimed 7 years earlier than would occur with the other alternatives. It will maximize the use of to-be-excavated Carlin material, a fine-grained plastic clayey silt, as an excellent growth medium and low permeability cover to accelerate reclamation of the Bazza Facility. Carlin material is not easily stockpiled in large volumes and otherwise would be disposed of in a waste rock facility.
- The reclamation design of the proposed Clydesdale WRF would be based upon landforms, watersheds, hill-slopes, and channels that mimic natural conditions in the region, thereby minimizing erosion and impacts to visual resources and wildlife habitat, while also promoting long-term stability.
- Mitigation measures have been incorporated into the design and reclamation plan for the Clydesdale WRF to minimize impacts to the existing mule deer migration corridor in the vicinity of the proposed facility. The deer migration corridor would be maintained at a width of at least 600 feet between the Clydesdale and Bazza waste rock facilities, and the proposed haul road would have breaks in the berms to allow wildlife passage. Surface

disturbance would be sequenced where possible such that if one part of the boundary of the corridor is disturbed, it would be completed and reclaimed before a subsequent section is started.

- The proposed Goldstrike No. 3 Tailings Facility would be constructed, operated, and closed according to NDEP, Bureau of Mining Regulation and Reclamation, Nevada Division of Water Resources, and Nevada Department of Wildlife regulations to minimize environmental impacts.
- Although the Bazza WRF Alternative would require more employees, which would be beneficial to the community, and reduce new surface disturbance, the alternative also would require burning more fuel, and cost more to mine the ore. Under certain economic conditions, such as increased operating costs or decreased gold price, the additional costs would increase the probability of cancellation of the project and the loss of the extension of the 1,600 jobs associated with the mine. The Bazza WRF Alternative would also delay reclamation of the existing Bazza WRF, resulting in the loss of Carlin material.
- The surface occupancy proposed in association with this Project meets the conditions specified in the applicable regulations (43 CFR § 3715).
- A reclamation bond to provide for reclamation of both private and public lands will continue to be required and regularly updated in compliance with both the 43 CFR 3809 regulations and the requirements of the Nevada Division of Environmental Protection.

#### **Public Involvement**

BGMI submitted the amendment to the Plan of Operations for the proposed Betze Pit Expansion Project in January 2007. Public scoping was initiated in March 2007. BLM published a Notice of Intent to prepare the SEIS in the Federal Register on May 29, 2007. BLM mailed a "Dear Interested Party" letter announcing the preparation of the EIS to the public on May 25, 2007.

A public scoping meeting was held in Elko, Nevada, at the BLM Elko District Office on June 25, 2007. The BLM issued a press release on June 3, 2007, announcing the public scoping meeting. The press release was distributed electronically to Congressional office staff, local government entities (city/county), federal and state agencies, and various media outlets throughout the proposed project area, including the Elko Daily Free Press, where it was published on June 23, 2007. The BLM received a total of 10 comment submittals (e.g., letter, email) containing 80 individual comments during the scoping period.

The Nevada Department of Wildlife (NDOW) and the Elko County Board of Commissioners (ECBC) were cooperating agencies for the preparation of this EIS. The NDOW focused on wildlife issues while the ECBC focused on socio-economic issues.

The Draft EIS was distributed to interested parties (shown at pages 4-3 and 4-4 of the Draft EIS). The BLM published a Notice of Availability of the Draft EIS in the Federal Register on August 22, 2008, and issued a news release announcing the 45-day Draft SEIS comment period. On September 10, 2008, the BLM held a public meeting at the BLM Elko District Office. Thirteen persons signed the attendance sheet. No written or verbal comments were submitted. During the comment period, the BLM received 11 letters containing 138 comments. Those comments are

reproduced in the Final SEIS along with the BLM's responses. Only minor changes were required and the abbreviated Final EIS was issued on March 27, 2009.

Throughout the preparation of the EIS, Native American consultation was conducted with the Te-Moak Tribe of Western Shoshone, Ely Shoshone Tribe, Duck Valley Sho-Pai Tribes of Idaho/Nevada, Wells Band Council, Elko Band Council, Duckwater Shoshone Tribe, Yomba Shoshone Tribe, Battle Mountain Band Council, South Fork Band Council, and the Western Shoshone Committee of Duck Valley. No concerns were raised.

Endangered Species Act consultation with the U.S. Fish and Wildlife Service (FWS) was conducted as BLM prepared the EIS. On January 16, 2009, the FWS concurred with BLM's finding that the proposed action is not likely to adversely affect the threatened Lahontan cutthroat trout (LCT) and concluded informal consultation.

Region 9 of the Environmental Protection Agency (EPA) participated in the analysis and commented on the Draft and Final EIS. EPA expressed concerns about the closure plans for the proposed Goldstrike No. 3 Tailings Facility and for future impacts on lands owned by Newmont Mining Corporation that have been used for management of dewatering operations. In the Final EIS, BLM added information for the design and closure plans for Goldstrike No. 3 Tailings Facility evaporation or evapotranspiration cells. The proposed cells are on private land, so permitting is under the authority of the Nevada Department of Environmental Protection (NDEP). BLM is limited to working with NDEP to ensure compliance with state law. BLM's response to EPA's concerns for impacts on lands owned by Newmont included providing additional information about a contractual agreement between BGMI and Newmont. EPA's comments on the Final EIS recommended BLM include a specific plan to ensure that measures are taken to address the transition to salt tolerant upland species on lands that have been saturated by water management operations or irrigated. BLM believes this is not necessary because BGMI has a contractual obligation to Newmont and an obligation to applicable state agencies as part of the reclamation plan. As noted in this Decision, environmental commitments that BLM can require are limited to the extent that the mining operations affect public land, as provided for by the 43 CFR 3809 regulations.

## **Appeals**

This Decision is subject to appeal pursuant to 43 CFR Section 3809.800. A party that is adversely affected may file such an appeal in accordance with the procedures in 43 CFR Part 4. An appeal shall be filed not later than 30 days after the date the ROD is issued.

<u>/s/</u>	May 5, 2009
Kenneth E. Miller, District Manager	Date